

PATENT
540606-2001REMARKS

This Amendment is in response to the Office Action mailed January 16, 2003, which set a three-month period for response making this response due April 16, 2003. Reconsideration and withdrawal of the rejections of this application are respectfully requested in view of this amendment and remarks herewith.

Amended claims 1 to 11 are pending in this application.

Applicant disagrees with the rejections made in the January 16, 2003 Office Action, however, in the interest of expediting prosecution of this patent application, claims 1 to 11 are amended. The claim amendments are made without prejudice, admission, surrender of subject matter and any intention to create any estoppel as to equivalents.

Support for the amended recitation in claims 1 to 11 can be found in the originally filed specification. Applicant reserves the right to pursue canceled subject matter in a continuation application.

No new matter is added.

It is submitted that these claims, as originally presented, are patentably distinct over the references cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. § 112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§ 101, 102, 103 or 112. Rather, these changes and additions are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

Applicant re-affirms his election of Group I directed to claims 1 to 11 for further prosecution of this application. Claims 12 to 14 are withdrawn from

PATENT
540606-2001

consideration pursuant to 37 C.F.R. § 1.142(b), as being drawn to nonelected subject matter.

§102 Rejections

Claims 1 to 7 and 9 to 11 are rejected under 35 U.S.C. § 102(b) as said to be anticipated by Marier et al., U.S. Patent No. 5,994,245. ("Marier"). (Office Action, at 3).

Claims 1 to 7 and 9 to 11 are rejected under 35 U.S.C. § 102(e) as said to be anticipated by Svoboda et al., U.S. Patent No. 6,158,253. ("Svoboda"). (Office Action, at 3).

Claims 1 to 7 and 9 to 11 are rejected under 35 U.S.C. § 102(e) as said to be anticipated by Knieler et al., U.S. Patent No. 6,160,196. ("Knieler"). (Office Action, at 3 to 4).

Claims 1 to 7 and 9 to 11 are rejected under 35 U.S.C. § 102(e) as said to be anticipated by Denesuk et al., U.S. Patent No. 6,196,156. ("Denesuk '156"). (Office Action, at 4).

Claims 1 to 7 and 9 to 11 are rejected under 35 U.S.C. § 102(a) as said to be anticipated by Denesuk et al., U.S. Patent No. 6,240,879. ("Denesuk '879"). (Office Action, at 4 to 5).

Since all § 102 rejections are directed to claims 1 to 7 and 9 to 11, these rejections will be addressed collectively.

The present invention claims and discloses an antimicrobial fabric. The fabric comprises two fibers, polyester and an acetate fiber having an odor-absorbing and/or odor-preventing and/or odor-reducing property. These fibers are combined with

PATENT
540606-2001

each other through a novel method taught by the present invention. The novel method is air entanglement. Air entanglement process comprises winding the polyester and the acetate fibers to a creel next to each other. As the fibers come off the creel, the fibers are entwined by using at least one air jet. By being entwined in this manner, the fibers are strengthened, elongated and evenly dispersed throughout the yarn, which in turn enhances the fibers' ability not to be leached or washed out during normal wear-and-tear of a manufactured product. The advantages of the present invention are not limited to control bacteria-related odors but also to absorb other odors. This is critical particularly for hunters since animals would run away as soon as they sense humans. The present invention not only controls odor, it additionally absorbs and masks the human scent and/or odor so as to allow hunters to come close to the shooting range of the game without being detected by animals.

For example, claim 1 now recites,

"An antimicrobial yarn comprising:

a first fiber; and

a second fiber,

wherein the first and second fibers are entwined with one another through the use of at least one air jet, and the second fiber comprises at least one agent which imparts odor-absorbing and/or odor-preventing and/or odor-reducing properties to the yarn."

Marier, Svoboda, Knieler, Denesuk '156 and Denesuk '879 either alone or in any combination do not disclose entwining at least two fibers through using at least one air jet.

PATENT
540606-2001

Marier relates to a laminated insole for footwear, which is made from a fibrous mat. Marier describes that the bottom of this fibrous mat may contain fibers that prevent fungus and bacteria growth. Contrary to the present invention, the Marier fibers do not contain a semi-dull polyester which provides a non-reflective property.

Furthermore, Marier does not disperse or weave anti-fungal materials into the fibrous mat. Marier merely applies an anti-fungal coating to a bottom layer of the insole thereby preventing fungal and bacterial growths.

Svoboda relates to a seamless sock that has a sheathing layer manufactured from a corespun yarn having channeled polyester fiber, antimicrobial fibers and spandex. This sheathing layer pulls heat-generated moisture away from the body to the outer layer of the sock. In contrast, the present invention does not have a sheathing layer but entwines its yarn in such a manner that antimicrobial fibers are evenly dispersed throughout the yarn.

Knieler relates to a wound covering made from a thread containing polyester and antimicrobial fibers. The wound covering is used for the treatment of infected wounds and the preventive protection against wound infection. Knieler, however, does not teach or suggest forming an antimicrobial yarn by entwining at least two fibers through the use of at least one air jet. Nor does Knieler use the wound covering to suppress odor. Contrary to the present invention, Knieler covering requires placing the hydrophobic material on the outside, away from the skin so the wound does not dry. An environment that is not dry tends to generate odor instead of preventing and controlling odor, thus, Knieler effectively teaches away from the present invention.

PATENT
540606-2001

Denesuk '156 relates to a bedding article for domestic animals. Denesuk '156 allows some fraction of its bedding, either the covering or the lining, to have some microbial-inhibiting agents. These agents are coated to the fibers whereas the microbial-inhibiting agents of the present invention are woven and entwined into the fiber. Thus the microbial-inhibiting agents of the present invention can withstand normal tearing and wearing while Denesuk's bedding would not be able to do so.

Denesuk '879 relates to an amusement article for domestic animals. The article's shape is defined by a non-woven material, preferably, a fibrous batting. The fibrous batting contains a selected group of fibers at least one of which is a microbe-inhibiting agent. The Denesuk '879 microbe-inhibiting agent is applied to the outer textile casing by spraying, dipping, brushing and rolling the microbe-inhibiting agent onto the textile casing and the inner filling. Contrary to Denesuk '879, the antimicrobial agents of the present invention are woven and/or entwined into the fibers.

"For a prior art reference to anticipate in terms of 35 U.S.C. 102(b), every element of the claimed invention must be identically shown in a single reference." *Scripps Clinic & Research Foundation v. Genetech, Inc.*, 18 U.S.P.Q.2d 1001 (Fed. Cir. 1991). Since none of the cited references disclose or suggest every element of the presently claimed invention (i.e., entwining a first and a second fiber with one another through the use of at least one air jet), the 35 U.S.C. 102(b) rejection based on Marier and the 102(e) rejections based on Svoboda, Knieler, Denesuk '156 and Denesuk '879 cannot stand.

Therefore Applicant believes that the pending claims as amended are patentable over Marier, Svoboda, Knieler, Denesuk '156 and Denesuk '879.

PATENT
540606-2001

Applicant respectfully requests the withdrawal of the rejections to claims 1 to 7 and 9 to 11 based on Marier, Svoboda, Knieler, Denesuk '156 and Denesuk '879.

§103 Rejections

Claim 8 is rejected under 35 U.S.C. § 103(a) as said to be unpatentable over Marier et al., U.S. Patent No. 5,994,245. ("Marier"). (Office Action, at 5).

Claim 8 is rejected under 35 U.S.C. § 103(a) as said to be unpatentable over Svoboda et al., U.S. Patent No. 6,158,253. ("Svoboda"). (Office Action, at 5 to 6).

Claim 8 is rejected under 35 U.S.C. § 103(a) as said to be unpatentable over Knieler et al., U.S. Patent No. 6,160,196. ("Knieler"). (Office Action, at 6).

Claim 8 is rejected under 35 U.S.C. § 103(a) as said to be unpatentable over Denesuk et al., U.S. Patent No. 6,196,156. ("Denesuk '156"). (Office Action, at 6 to 7).

Claim 8 is rejected under 35 U.S.C. § 103(a) as said to be unpatentable over Denesuk et al., U.S. Patent No. 6,240,879. ("Denesuk '879"). (Office Action, at 8).

Claim 8 recites in part,

"wherein the first and second fibers are combined to one another, the second fiber is at least about 25% by weight of the total yarn, and the acetate is comprised of at least one antimicrobial agent."

Examiner admits that Marier, Svoboda, Knieler, Denesuk '156 and Denesuk '879 do not disclose "the teaching that the acetate fiber is at least 25% by weight of the total fabric."

Examiner also states that "It should be noted that increasing the amount of antimicrobial acetate fiber in the fabric is a result effective variable. The larger the amount of antimicrobial acetate fiber in the fabric directly affects the amount

PATENT
540606-2001

antimicrobial property of the fiber." (Office Action, page 7, lines 5-8). Accordingly, the Examiner concludes that it would have been obvious to one skilled in the art to add more antimicrobial fiber to increase the antimicrobial properties.

But it would not have been obvious to increase the acetate fiber to 25% of the total weight of the yarn because antimicrobial fibers are weak. The more antimicrobial agents that are imparted to a fiber, the less durable the material becomes. Therefore, it was critical during the reduction to practice stage of the present inventive process to find the most advantageous combination of antimicrobial and non-antimicrobial fibers without sacrificing the durability of the fiber. In order to knit or weave a fabric, the fabric must be strong, elongatable, remain even and does not cause the fabric to unravel. Applicant has to balance impacting the maximum amount of effective antimicrobial agent and the same time making sure the fiber can maintain its strength to withstand knitting and weaving. The claimed fabric accordingly, is not a routine procedure of merely adding more antimicrobial acetate fiber to a fabric as suggested by the Examiner.

Additionally, Applicant's fabric absorbs and masks human odors and/or scents in addition to preventing the growth of odor-producing bacteria, so that animals are unable to detect human presence, thus making hunting less taxing. This anti-detection quality is not obvious in view of any of the cited references because the references were only related to smells that a human can perceive. It is well known that a human's sense of smell is inferior to that of most animals. Therefore the need to increase antimicrobial fibers to 25% was not a factor considered in the cited references because more antimicrobial fibers would not increase the effectiveness the fabrics would have on

PATENT
540606-2001

human olfactory organs. Moreover, the fabric in accordance with the present invention is also anti-reflective due to the use of the semi-dull polyester and can easily be dyed into any pattern or color of desire in order to camouflage the hunters.

Accordingly, the fabric as claimed and disclosed in the present invention is capable of absorbing and masking the human scent and thus, not detectable by animals. In addition, the present invention also prevents and controls the generation of human odors while still allowing the fabric to be strong enough for weaving, knitting, dying and styling.

In view of the foregoing, Applicant respectfully submits that the antimicrobial yarn as claimed in claim 8 is not obvious over any of the cited references either alone or in any combination.

In an obviousness rejection, the standard established in *In re Fritch*, 23 U.S.P.Q.2d 1780, 1783-84 (Fed. Cir. 1992), must be followed. *Fritch* in pertinent part states:

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

Even though a reference can be modified in a way that the Examiner suggests, it does not mean that the reference renders the instant invention obvious unless the motivation to do the modification is in the reference's teaching. Accordingly, it is respectfully submitted that the references cited in the Office Action do not teach or suggest the present invention as claimed and disclosed. There is nothing in the references' teachings that would suggest the modification or the desirability of the modification of any of the prior references to arrive at the present invention. There is no

PATENT
540606-2001

evidence in the Office Action showing why a skilled artisan would have been motivated to modify the cited references in order to achieve the present invention as claimed and disclosed.

The Examiner is respectfully invited to cite references for the desirability of modification and the teaching, suggestion or incentive for modification of the reference teachings or provide an affidavit, as called for by 37 C.F.R. §1.106(b) and M.P.E.P. §706.02(a). Otherwise, it is respectfully submitted that the Section 103 rejection must be withdrawn.

Accordingly, none of the cited references, alone or in any combination, render Applicant's invention *prima facie* obvious. Moreover, none of the references teach or suggest the surprising properties of the presently claimed invention as shown in the application, which properties, Applicant submits, are additionally demonstrative of the patentability of the instant invention.

Consequently, claim 8 is not obvious in view of the cited references because none of the cited references supplies the deficiencies claimed and disclosed in the present invention. Therefore it is believed that claim 8 is patentable over the cited references.

Applicant therefore respectfully requests that the rejection of claim 8 under 35 U.S.C. §103(a) be withdrawn.

In view of these amendments and remarks, Applicant respectfully submits that claims 1 to 11 now pending in the application are in condition for allowance. Applicant respectfully requests an early, favorable and expedited reconsideration and prompt issuance of a Notice of Allowance is earnestly solicited.

PATENT
540606-2001

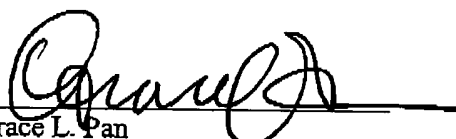
If any issue remains as an impediment to allowance, an interview with the Examiner is respectfully requested, prior to issuance of any paper other than a Notice of Allowance; and, the Examiner is respectfully requested to contact the undersigned to arrange a mutually convenient time and manner for such an interview.

The commissioner is hereby authorized to charge any additional fees or credit any overpayment therein to Deposit Account No. 50-0320 for considering and entry of this Amendment.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicant

By:



Grace L. Pan
Registration No. 39,440
Tel. (212) 588-0800
Fax (212) 588-0500